

# МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ КАФЕДРА ІНОЗЕМНИХ МОВ ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ ЦЕНТР

## **МАТЕРІАЛИ**

# ХІV ВСЕУКРАЇНСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ СТУДЕНТІВ, АСПІРАНТІВ ТА ВИКЛАДАЧІВ ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО ЦЕНТРУ КАФЕДРИ ІНОЗЕМНИХ МОВ

# **«TO MAKE THE WORLD SMARTER AND SAFER»**

26 березня 2020 року



Сумський державний університет (вул. Римського-Корсакова, 2, м. Суми, Сумська обл., 40007)

Суми 2020

### NANOTECHNOLOGY IN OUR LIFE

O.Mandryka - Sumy State University, group MB-91 I.A. Morozova EL-adviser

We live in a time of great development. However, most people do not even think that we can all contribute to the development of certain industries. The development of nanotechnology is now very important for humanity and no one can even predict what we can reach in the future with the help of it.

The term "nanotechnology" should be understood as one of the fields of scientific and engineering disciplines investigating processes occurring on an atomic and molecular scale. Nanotechnology involves manipulating materials and devices of very small sizes much smaller than we are used to. Nanoparticles are generally assumed to be of sizes from 0.1 nm to 100 nm.

Back in 1986, futurist Eric Dressler painted an image of a utopian future in which self-replicating (i.e. self-replicating) nanorobots do all the work society needs. These tiny devices are able to fight different human diseases making people virtually immortal. Nanorobots can also move freely in the environment, making them indispensable in combatin pollution in the environment.

Nanotechnologies are expected to provide a significant breakthrough in computer technology, medicine, as well as in military affairs. For example, medical science has developed ways to deliver drugs directly against cancer tissues in tiny "nanobombs." In the future, nanos can "patrol" arteries, countering infections and providing diagnosis of diseases.

Nanotechnologies are already used in the production of hard drives of personal computers, catalytic converters - elements of internal combustion engines, tennis balls with long service life, as well as highstrength and simultaneously light tennis racquets, tools for cutting metals, antistatic coatings for sensitive electronic equipment, special coatings for windows providing their self-cleaning.